

YAC/BAC contig covering the *FRI* locus

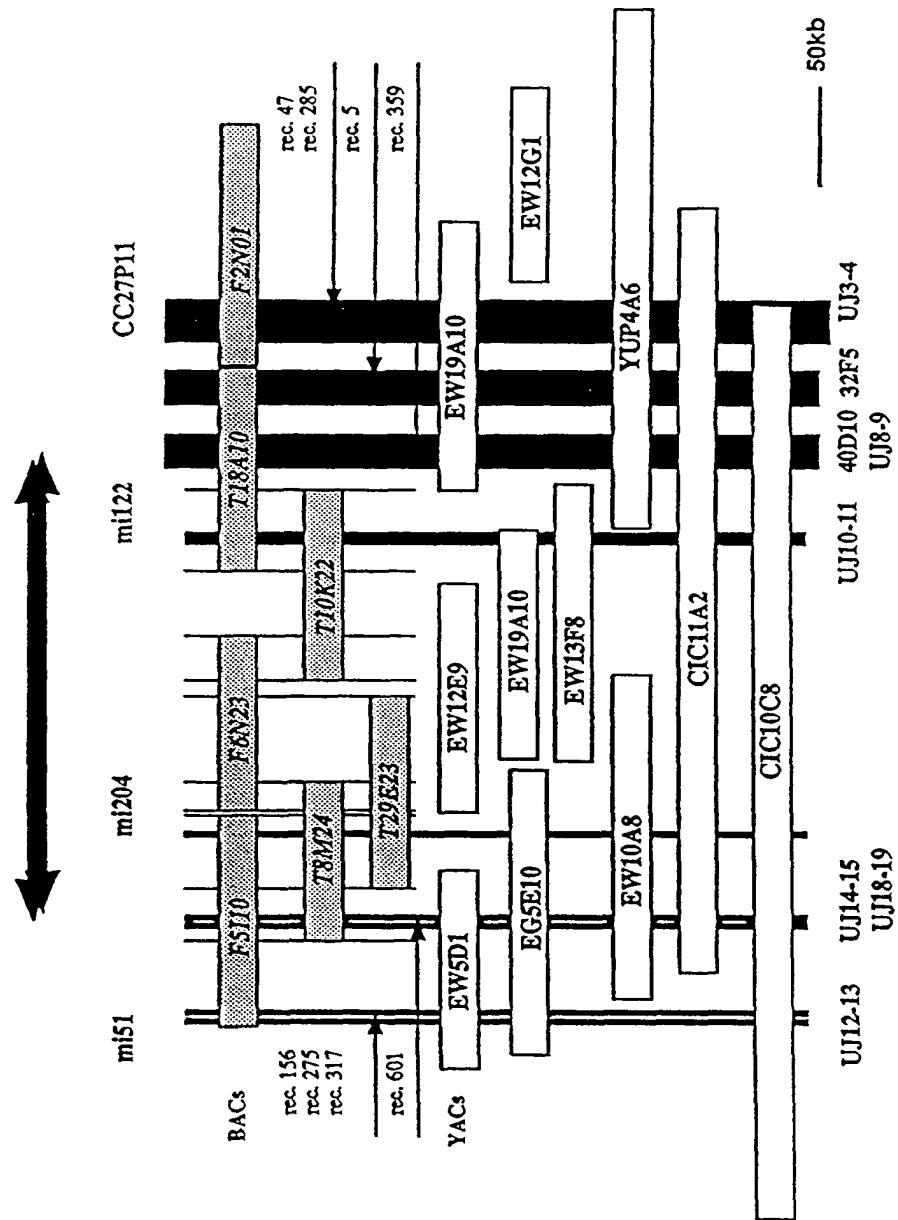


Fig 1

Cosmid contig covering *FRI*

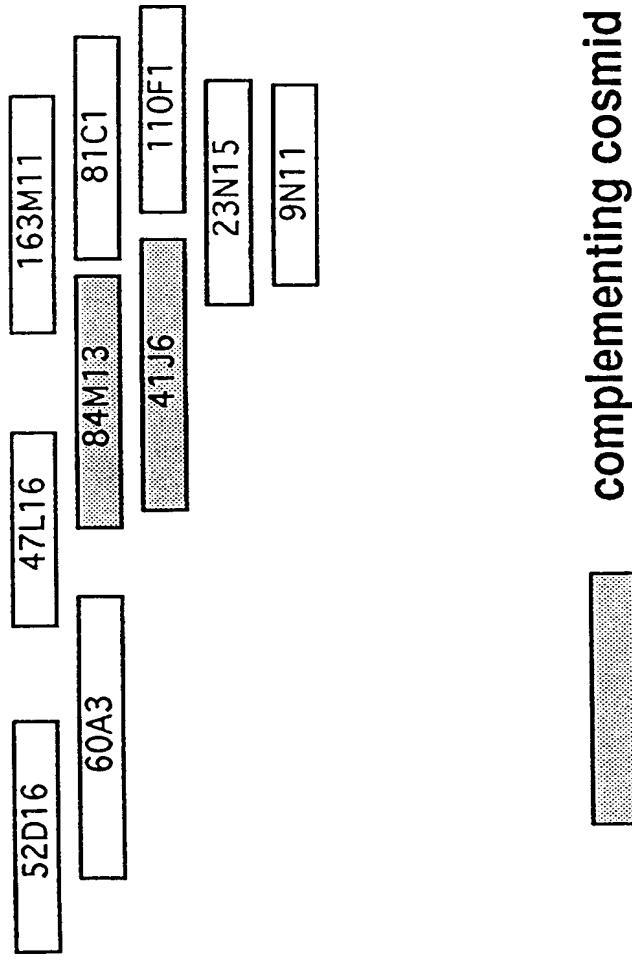


Fig 2

Subclones of 84M13 and FN mutations

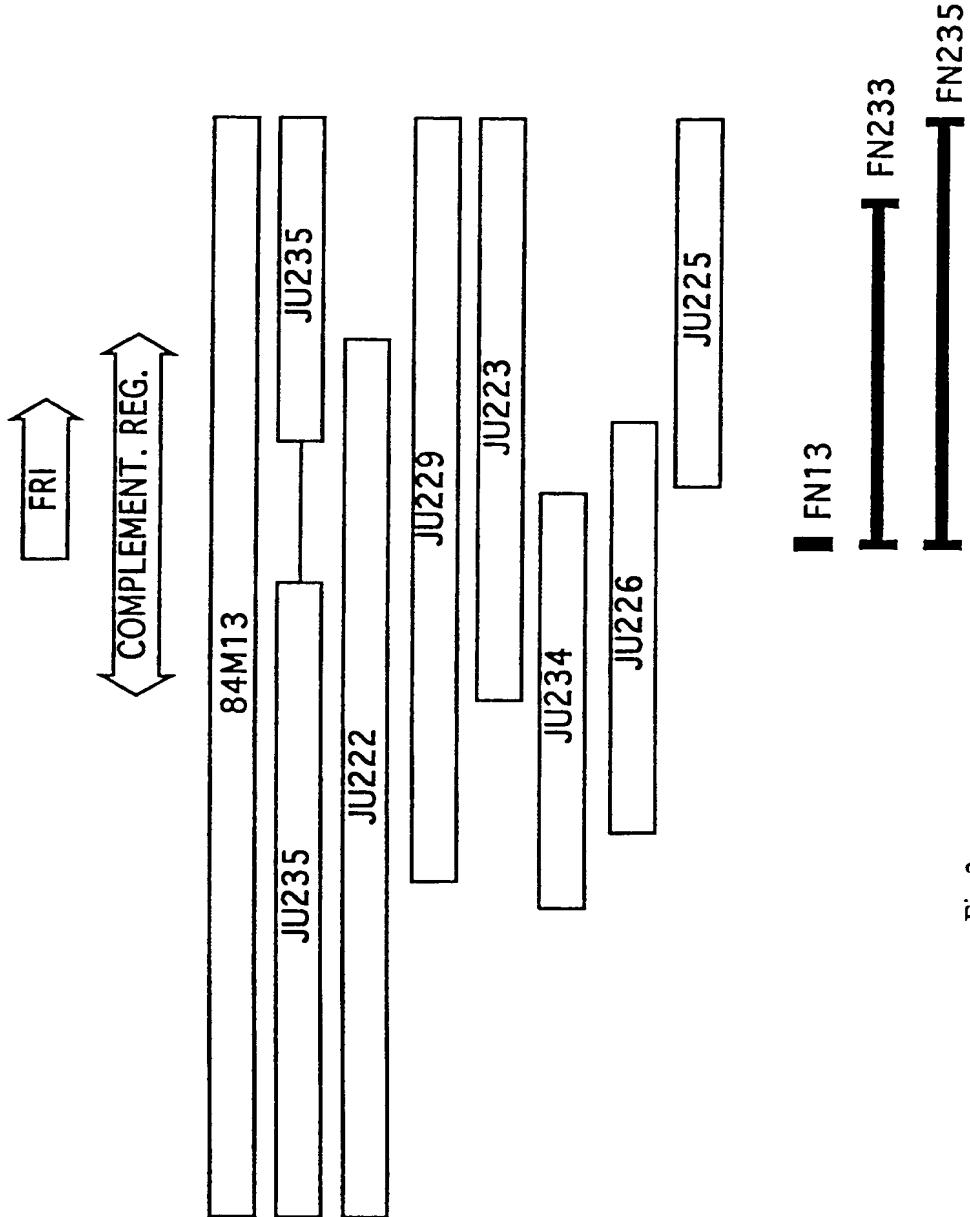


Fig 3

1 AGTACTCACA AGTCACAACT TAAACCAAGT ACACAAGGAT TTTATCATGG
51 GATTATCGTG TTTGAAGACT AAAAAGAGCA CACCATCACCC CCCATTAGTG
101 CAGGTAGAGT AAGACAGTAA CTTTTGGGTT CATATTACCG AGCAAGAAC
151 GTTATTTGTG ATTAGACATG TTATAAACCA CTGCTTAGT GACTATTTAA
201 AACAAATATAT TACATGTCGT AATCATGCAA CCTAACTATG TTTTCATTAA
251 TCAAATACAA AGAATAAAGA GAAAAGTGC TAGATTCAAT TATTGGCAT
301 AGACTCAAAA GAGTGTATAT ATATCTGACT TTTATTAAAT TATTAAACAC
351 AAATACATAT TTTCATAAGC AAAACTATAA AAGCCCTAAA CATATAATGA
401 TTACCTCAAA GGAAAAAGTC GTTTTCTCCT ACTTAAAAGA TAGGTTACTT
451 CCTAATTAAT ATATAATTAA TGTGAACCTTC ACAATATACA GTTCAATAAA
501 ATTTGGTAAT TTGACCGATT TAAGGAGAGT GGAAATTAGG GCTTCTGCAA
551 TCTTTTTCT TCGCCGCAAT CTCATGTCCA ATTATCCACC GACGGTGGCG
601 GCGCAACCCA CAACGACGGC GAATCCACTG CTGCAGCGAC ATCAATCTGA
651 ACAGCGACGA AGAGAATTAC CGAAGATTGT CGAAACAGAG TCTACAAGTA
701 TGGACATTAC GATCGGTCAA TCTAAGCAGC CTCAATTTT GAAATCCATA
751 GACGAATTAG CTGCCCTTTC AGTTGCAGTG GAAACATTCA AACGCCAATT
801 CGATGATCTT CAGAAGCACA TCGAGTCAAT CGAAAACGCA ATTGATTCCA
851 AACTCGAGAG TAACGGCGTT GTCCTCGCCG CGCGGAACAA TAATTTCCAT
901 CAGCCGATGT TATGCCCTCC GCGGAACAAT GTATCTGTAG AAACCACCGT
951 CACTGTGAGC CAACCGTCTC AGGAGATTGT ACCGGAGACG TCGAATAAAC
1001 CGGAGGGGGG ACGTATGTGT GAGTTGATGT GTAGCAAAGG TCTGCGTAAA
1051 TACATATACG CGAATATCTC TGATCAAGCT AAGTTAATGG AAGAGATTCC

Fig 4

1101 TTCAGCTTG AAATTGGCCA AGGAGCCAGC GAAGTTGTA TTGGATTGTA
 1151 TTGGCAAGTT TTACTTACAA GGGCGTAGAG CATTACTAA AGAGTCGCCT
 1201 ATGAGCTCTG CGAGACAAGT TTCGCTTCTT ATACTGGAGT CTTTCTTCT
 1251 AATGCCTGAT CGTGGTAAAG GGAAGGTGAA GATTGAGAGT TGGATTAAAG
 1301 ATGAGGCGGA GACGGCTGCT GTTGCTTGGA GGAAAAGGTT GATGACTGAA
 1351 GGAGGATTAG CTGCGGCTGA GAAAATGGAT GCAAGGGTT TGCTTTACT
 1401 AGTTGCTTGT TTTGGTGTTC CTTCAAACCT TAGGAGTACA GATTTGCTGG
 1451 ATTTGATAAG GATGAGTGGT TCGAATGAGA TTGCCGGTGC TTTGAAGCGG
 1501 TCACAGTTTC TTGTCCCTAT GGTCTCAGGT ACCATATTCT GTTCTCACTC
 1551 GGTGAATTTC ATTGCAAAGG TGGTCCTTT TGGTACATC ATCGACCAAC
 1601 ATCAAGTTCC ATCTTGTTC TTGATAAGC TTGATGGTAT AAACTAGGAG
 1651 AGCACATCAA ATATTTAGAG TGCAATGACT GATTGAGCCA AATCTAGCT
 1701 AGAAATTAAT CTGGAAAGAA CTTGGAACTC TCAACCATAAG GTTTGGTAC
 1751 GAAATTGTTG CTTGTCAGAA CCAAATGATA GGCTATTGCC TTGAAATAGT
 1801 GTTTCTTGTG GTTTCCAATA TTGGAAGTTA AAATCGTATG ACTTAGCTGT
 1851 TGGATACTAA TTAAGCTTAA GCAATGCCAA CTCTAAGAAG TGGTACTTAC
 1901 ACAATATTCT ATTGGTCATA GGTATAGTTG AATCAAGTAT CAAGCGTGGA
 1951 ATGCATATTG AAGCTCTTGA GATGGTTTAT ACCTTGGCA TGGAGGATAA
 2001 GTTTTCAGCT GCTCTAGTTC TAACCTCATT CTTAAAGATG AGCAAGGAGT
 2051 CATTGAGAG GGCAAAACGG AAAGCCCAGT CACCGCTGGC ATTTGTATGA
 2101 ACCCTTCCCT TGCACATTAT GTACCTTAT GAACTCTTA TCATCATCTG
 2151 AGTCTGACCA TTGATATATT TATTTCTCAA CAGAAAGAAG CGGCTACAAA
 2201 GCAGCTAGCT GTGTTATCAT CAGTTATGCA GTGTATGGAG ACTCACAAAGT
 2251 TAGATCCTGC GAAAGAACTA CCAGGATGGC AGATCAAAGA GCAAATTGTT
 2301 AGCTTGGAGA AAGACACTCT TCAGCTCGAC AAAGAGATGG AAGAGAAAGC
 2351 AAGATCTCTC AGTTAATGG AGGAAGCCGC ACTTGCCAAG AGAATGTATA
 2401 ACCAACAGAT AAAACGTCCA AGGTTGTCAC CCATGAAAT GCCACCAGTA
 2451 ACTTCTTCAT CGTATTCTCC TATCTACCGT GATAGAAGCT TTCCTAGTCA

Fig 4 (cont)

2501 AAGAGACGAT GACCAAGATG AAATATCAGC TCTTGTGAGT AGTTACCTCG
2551 GCCCGTCAAC ATCTTTCCCT CATCGCTCAA GAAGATCCCC GGAATATATG
2601 GTTCCACTTC CACATGGTGG GTTAGGAAGA AGTGTATATG CATATGAACA
2651 TCTGGCCCCA AATTCTACT CTCCAGGTCA CGGACATAGA CTTCATCGAC
2701 AGTACTCTCC GTCTTGTTT CACGGACAGA GACATCCACT ACAGTACTCT
2751 CCTCCAATTC ATGGACAACA ACAGTTACCA TATGGTATAAC AAAGGGTTTA
2801 CAGACATTCA CCATCTGAAG AAAGATATTT GGGTTTATCC AATCAAAGGT
2851 CTCCTCGCAG TAACTCATCA TTAGACCCC AATAGGAGGA ATGTAAATTT
2901 GTAACAAAGC TTTTGTTTT TGCTTAAGTT AGTCATTTAT TTAACTCCCA
2951 ACAGTCTCAA AATTAAATTT AATGTTGGG GCTTAAGAAT GCAAATTTT
3001 TTGCTCCTGT AATTGACATT TAAGATGCTA ATGTTATTGC TTCAGAGGTT
3051 TTAGTCAACC TCAGATACAT CGATATCACT ATCTAAATAG ACCTCTGGCT
3101 CTTGGTCATC TGGATTCTCT TCATCTTCTG TCTCTGTTCC TTCTGTTCT
3151 CGTTGCCTG CTCGAGCAAT TGCGGATTCC AACCTTGTGC TTACAGTTTC
3201 CCATGACACA AGCTTTCCA TGAATGTATT TATGTCCGCC TTCTTATCTT
3251 TCTTGAGGAA GATGAATTCA CCGAAGATCC AACTTGAGCT TGACAATCAA
3301 TCAAATCCGA AACAGAAAACA GAGCTTTTG ACATCTTGA TTTAGCAGTC
3351 TTTGATCTTG AGGAATATCA ATGAACACTA GATAACTCA CACTTGCAGG
3401 CTTTAAACTG GATTTAACAC ATGAATAGAA GCATTGATTC CATGGAATGT
3451 GGTAAGTGAC ATAGCTGGAC TTCTTAAACA AATGTATGAA CGGGTAGGGT
3501 TCATTACAAT GTAGTTATAC AGCACTGAGA TTTATGGAAG AAAAAAAGGA
3551 CACAGCTTA GATATCTACA GAGAGACAAG AACACTAAAG ACAAGAGAAT
3601 CATAAGTTCA GGAGTTCGTT AAAATGGCTC TATTCAAATC ACACATTGGC
3651 ACAAGACCAAC TAATAAGATA CCAAGTGGGA CAATCGAAAG AGAATAAGAG
3701 ATAGCATATC AGAGAGAGAG AGAGATTTTG TGAGGAGGGA GAAGTTCGCC
3751 GGAGGCTTCT G

Fig 4 (cont)

1 CATGTCGTAA TCATGCAACC TAACTATGTT TTCATTAATC AAATACAAAG
51 AATAAAGAGA AAAGTGCAGA GATTCAATTA TTTGGCATAG ACTCAAAAGA
101 GTGTATATAT ATCTGACTTT TATTAAATTA TTAAACACAA ATACATATTT
151 TCATAAGCAA AACTATAAAA GCCCTAAACA TATAATGATT ACCTCAAAGG
201 AAAAAGTCGT TTTCTCCTAC TTAAAAGATA GGTTACTTCC TAATTAATAT
251 ATAATTTATG TGAACCTCAC AATATACAGT TCAATAAAAT TTGGTAATTT
301 GACCGATTAA AGGAGAGTGG AAATTAGGGC TTCTGCAATC TTTTTCTTC
351 GCCGCAATCT CATGTCCAAT TATCCACCGA CGGTGGCGGC GCAACCCACA
401 ACGACGGCGA ATCCACTGCT GCAGCGACAT CAATCTGAAC AGCGACGAAG
451 AGAATTACCG AAGATTGTCG AAACAGAGTC TACAAGTATG GACATTACGA
501 TCGGTCAATC TAAGCAGCCT CAATTTTGAA AATCCATAGA CGAATTAGCT
551 GCGTTTCAG TTGCAGTGGAA AACATTCAAA CGCCAATTGATGATCTTCA
601 GAAGCACATC GAGTCAATCG AAAACGCAAT TGATTCCAAA CTCGAGAGTA
651 ACGGCGTTGT CCTCGCCGCG CGGAACAATA ATTTCCATCA GCCGATGTTA
701 TCGCCTCCGC GGAACAATGT ATCTGTAGAA ACCACCGTCA CTGTGAGCCA
751 ACCGTCTCAG GAGATTGTAC CGGAGACGTC GAATAAACCG GAGGGGGGAC
801 GTATGTGTGA GTTGATGTGT AGCAAAGGTC TGCGTAAATA CATATACGCG
851 AATATCTCTG ATCAAGCTAA GTTAATGGAA GAGATTCCCTT CAGCTTGAA
901 ATTGGCCAAG GAGCCAGCGA AGTTTGTATT GGATTGTATT GGCAAGTTTT
951 ACTTACAAGG GCGTAGAGCA TTTACTAAAG AGTCGCCTAT GAGCTCTGCG
1001 AGACAAGTTT CGCTTCTTAT ACTGGAGTCT TTTCTTCTAA TGCCTGATCG
1051 TGGTAAAGGG AAGGTGAAGA TTGAGAGTTG GATTAAAGAT GAGGCGGAGA

Fig 5

1101 CGGCTGCTGT TGCTGGAGG AAAAGGTTGA TGACTGAAGG AGGATTAGCT
 1151 GCGGCTGAGA AAATGGATGC AAGGGGTTG CTTTTACTAG TTGCTTGT
 1201 TGGTGTTCCT TCAAACCTTA GGAGTACAGA TTTGCTGGAT TTGATAAGGA
 1251 TGAGTGGTTC GAATGAGATT GCCGGTGCTT TGAAGCGGTC ACAGTTCTT
 1301 GTCCCTATGG TCTCAGGTAT AGTTGAATCA AGTATCAAGC GTGGAATGCA
 1351 TATTGAAGCT CTTGAGATGG TTTATACCTT TGGCATGGAG GATAAGTTT
 1401 CAGCTGCTCT AGTTCTAACT TCATTCTAA AGATGAGCAA GGAGTCATT
 1451 GAGAGGGCAA AACGGAAAGC CCAGTCACCG CTGGCATTAA AAGAAGCGGC
 1501 TACAAAGCAG CTAGCTGTGT TATCATCAGT TATGCAGTGT ATGGAGACTC
 1551 ACAAGTTAGA TCCTGCGAAA GAACTACCAG GATGGCAGAT CAAAGAGCAA
 1601 ATTGTTAGCT TGGAGAAAGA CACTCTTCAG CTCGACAAAG AGATGGAAGA
 1651 GAAAGCAAGA TCTCTCAGTT TAATGGAGGA AGCCGCACCT GCCAAGAGAA
 1701 TGTATAACCA ACAGATAAAA CGTCCAAGGT TGTCACCCAT GGAAATGCCA
 1751 CCAGTAACCTT CTTCATCGTA TTCTCCTATC TACCGTGATA GAAGCTTTCC
 1801 TAGTCAAAGA GACGATGACC AAGATGAAAT ATCAGCTCTT GTGAGTAGTT
 1851 ACCTCGGCCGTCAACATCT TTTCCTCATC GCTCAAGAAG ATCCCCGGAA
 1901 TATATGGTTC CACTTCCACA TGGTGGGTTA GGAAGAAGTG TATATGCATA
 1951 TGAACATCTG GCCCCAAATT CATACTCTCC AGGTACCGA CATAGACTTC
 2001 ATCGACAGTA CTCTCCGTCT TTGGTTCACG GACAGAGACA TCCACTACAG
 2051 TACTCTCCTC CAATTCACTGG ACAACAAACAG TTACCATATG GTATACAAAG
 2101 GGTTTACAGA CATTCAACAT CTGAAGAAAG ATATTTGGGT TTATCCAATC
 2151 AAAGGTCTCC TCGCAGTAAC TCATCATTAG ACCCCAAATA GGAGGAATGT
 2201 AAATTTGTAA CAAAGCTTT TGTTTTGCT TAAGTTAGTC ATTTATTTAA
 2251 CTCCCCAA

Fig 5 (contd)

1 MSNYPPPTVAA QPTTTANPLL QRHQSEQRRR ELPKIVETES TSMDITIGQS
51 KQPQFLKSID ELAAFSVAVE TFKRQFDDLQ KHIESIENAI DSKLESNGVV
101 LAARNNNFHQ PMLSPPRNNV SVETTVTVSQ PSQEIVPETS NKPEGGRMCE
151 LMCSKGRLKY IYANISDQAK LMEEIPSALK LAKEPAKFVL DCIGKFYLQG
201 RRAFTKESPM SSARQVSLLI LESFLLMPDR GKGVVKIESW IKDEAETAAV
251 AWRKRLMTEG GLAAAEEKMDA RGLLLHVACF GVPSNFRSTD LLDLIRMSG
301 NEIAGALKRS QFLVPMVSGI VESSIKRGMH IEALEMVYTF GMEDKFSAAL
351 VLTSFLKMSK ESFERAKRKA QSPLAFKEAA TKQLAVLSSV MQCMETHKLD
401 PAKELPGWQI KEQIVSLEKD TLQLDKEMEE KARSLSLMEE AALAKRMYNQ
451 QIKRPRLSPM EMPPVTSSSY SPIYRDRSFP SQRDDQDEI SALVSSYLG
501 STSFPHRSRR SPEYMVPLPH GGLGRSVYAY EHLAPNSYSP GHGHRLHRQY
551 SPSLVHGQRH PLQYSPPPIHG QQQLPYGIQR VYRHSPSEER YLGLSNQRSP
601 RSNSSLDPK

Fig 6

TABLE 3
 33 ecotypes grouped after FT and PCR marker genotype
 Flowering time scored as early/late or days to flowering

Ecotype	FT	Promoter	BsmFI(GRM)	+16 nt
Li-5	Early	+	-	-
Col	Early	+	-	-
En	Early	+	-	-
Ws	Early	+	-	-
Nd	Early	+	-	-
MT-0	54	+	-	-
Köln	54	+	-	-
Cvi	Early	+	+	+
Wil	Early	+	+	+
S96	Early	+	+	+
Est-0	Early	+	Het	Het
Shakhdara	47	+	+	+
KZ-9	64	+	+	+
PU-2-8	85	+	+	+
Ler	Early	-	+	+
TSU-0	57	-	+	+
Dijon	Intermed?	-	+	+
Gr	Intermed.	-	+	+
St	Late	+	+	+
Sf-2	Late	+	+	+
Te	Late	+	+	+
Ko	Late	+	+	+
Öst	Late	?	?	+
Can	Late	+	+	+
Vimmerby	137	+	+	+
Lisse	140	+	+	+
PU-2-3	153	+	+	+
GOT-32	179	+	+	+
Lund	180	+	+	+
TAMM-46	250	+	+	+
NC-6	188	+	-	+
DEM-4	223	+	-	+
Algutrum	251	+	-	+

Fig 7